

Appl. No. 10/658,220
Reply to Office Action mailed May 18, 2006

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 to 3. (canceled)

Claim 4. (currently amended) a film-laminated metal sheet for a container comprising resin films, the resin films each containing a polyester as a main component, on both surfaces of a metal sheet, wherein

a polarity force component γ_s^h of a surface free energy of a surface of the resin film positioned on an inner surface side of the container after formation of the container and that is to be in contact with a content of the container is 4×10^{-3} N/m or less,

a region, where a birefringence of the resin film positioned on the inner surface side of the container after formation of the container is 0.02 or less, is less than 5 μm from a contact interface with the metal sheet in the thickness direction, said

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birefringence is determined by measuring retardation in a cross-sectional direction of the film after removal of the metal sheet from the film-laminated metal sheet, wherein the resin film positioned on the inner surface side of the container contains 0.1% to 2% in a ratio by mass of a wax component with respect to the resin film.

Claim 5. (canceled)

Claim 6. (currently amended) [[The]] A film-laminated metal sheet for a container according to claim [[2]], comprising resin films, the resin films each containing a polyester as a main component on both surfaces of a metal sheet, wherein a polarity force component γ_s^h of a surface free energy of a surface of the resin film positioned on an inner surface side of the container after formation of the container and that is to be in contact with a content of the container is 4×10^{-3} N/m or less,

a region, where a birefringence of the resin film positioned on the inner surface side of the container after formation of the container is 0.02 or less, is less than 5 μ m from a contact interface with the metal sheet in the thickness direction, said

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birefringence is determined by measuring retardation in a cross-sectional direction of the film after removal of the metal sheet from the film-laminated metal sheet, wherein the resin film positioned on the inner surface side of the container further contains a polyester as a main component and contains 0.80% to 2.0% in a ratio by mass of a wax component with respect to the resin film.

Claim 7. (previously presented) The film-laminated metal sheet for a container according to claim 4, wherein the wax component is carnauba wax or ester stearate.

Claim 8. (currently amended) The film-laminated metal sheet for a container according to claim [[1]] 4, wherein the resin film containing a polyester as a main component is a biaxially oriented polyester film having a relaxation time $T_{1\rho}$ of a benzene ring carbon at a 1,4 coordinate in a structure analysis according to a high solid resolution NMR of 150 msec or longer.

Claim 9. (currently amended) The film-laminated metal sheet for a container according to claim [[1]] 4, wherein the resin film containing a polyester as a main component is a biaxially

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oriented polyester film having a melting point in a range of 240°C to 300°C, the content of a terminal carboxyl group is in a range of 10 to 50 equivalent/ton, and an isophthalic acid component is not substantially contained as an acid component.

Claim 10. (currently amended) The film-laminated metal sheet for a container according to claim [[1]] 4, wherein the resin film containing a polyester as a main component is a biaxially oriented polyester film having an amorphous Young's modulus in a range of 120 to 220 kg/mm².

Claim 11. (currently amended) The film-laminated metal sheet for a container according to claim [[1]] 4, wherein 95 mol % or more of polyester units constituting the resin film containing a polyester as a main component are ethylene terephthalate units.

Claim 12. (currently amended) The film-laminated metal sheet for a container according to claim [[1]] 4, wherein the resin film containing a polyester as a main component is a biaxially oriented polyester film wherein 93 mol % or more of the polyester units constituting the resin film are ethylene

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terephthalate units, and having a crystal size χ in a (100) plane obtained through an X-ray diffraction measurement of 6.0 nm or smaller.

Claim 13. (currently amended) The film-laminated metal sheet for a container according to claim [[1]] 4, wherein the resin film containing a polyester as a main component is a biaxially oriented polyester film having 93 mol % or more of the polyester units constituting the resin film are ethylene terephthalate units, and having a crystal orientation parameter R obtained through an X-ray diffraction measurement is 20×10^{-2} or more.

Claim 14. (canceled)

Claim 15. (currently amended) A film-laminated metal sheet for a container comprising resin films, the resin films each containing a polyester as a main component on both surfaces of a metal sheet, wherein

a resin film positioned on an inner surface side of the container after formation of the container comprises at least two layers, a resin film positioned on an outer surface side of the

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container after formation of the container comprises at least one layer; and a polarity force component γ_s^h of a surface-free energy of a surface where an uppermost-layer resin film, which is one of the at least two resin layers and which is positioned on the outer surface side of the container, is to be in contact with a content of the container is 4×10^{-3} N/m or less,

a region, where a birefringence of the resin film positioned on the inner surface side of the container after formation of the container is 0.02 or less, is less than 5 μm from a contact interface with the metal sheet in the thickness direction,

wherein the uppermost-layer resin film further contains 0.1%
to 2% in a ratio by mass of a wax component with respect to the
uppermost-layer resin film.

Claim 16. (currently amended) A film-laminated metal sheet for a container comprising resin films, the resin films each containing a polyester as a main component on both surfaces of a metal sheet, wherein

a resin film positioned on an inner surface side of the container after formation of the container comprises at least two resin layers, a resin film positioned on an outer surface side of the container after formation of the container comprises at least

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one resin layer;

a polarity force component γ_s^h of a surface-free energy of a surface where an uppermost-layer resin film, which is one of the at least two resin layers and which is positioned on the outer surface side of the container, is to be in contact with a content of the container is 2×10^{-3} N/m or less,

a region, where a birefringence of the resin film positioned on the inner surface side of the container after formation of the container is 0.02 or less, is less than 5 μm from a contact interface with the metal sheet in the thickness direction,

wherein the uppermost-layer resin film further contains 0.85 to 2% in a ratio by mass of a wax component with respect to the uppermost-layer resin film.

Claim 17. (previously presented) The film-laminated metal sheet for a container according to claim 15, wherein the uppermost-layer resin film is blended with 5% to 20% in a ratio by mass of an olefin resin with respect to the uppermost-layer resin film.

Claim 18. (canceled)

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Claim 19. (previously presented) The film-laminated metal sheet for a container according to claim 16, wherein the uppermost-layer resin film is blended with 10% to 20% in a ratio by mass of an olefin resin with respect to the uppermost-layer resin film.

Claim 20. (canceled)

Claim 21. (currently amended) The film-laminated metal sheet for a container according to claim [[18]] 15, wherein the wax component is carnauba wax or ester stearate.

Claim 22. (canceled)

Claim 23. (canceled)

Claim 24. (previously presented) The film-laminated metal sheet for a container according to claim 15, wherein at least one of the at least two resin films positioned on the inner surface side of the container after formation of the container contains a color pigment or a color dye.

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Claim 25. (previously presented) The film-laminated metal sheet for a container according to claim 15, wherein at least one of the at least two resin films positioned on the outer surface side of the container after formation of the container contains a color pigment or a color dye.

Claims 26 to 30. (canceled)